LIST OF CONTENTS

2005

Vol. 46, No. 1

Articles

J. Maruyama, H. Hayashi, J. Miao, H. Sawada and S. Araki	1	Severe cell fragmentation in the endothelial cell apoptosis induced by snake apoptosis toxin VAP1 is an apoptotic characteristic controlled by caspases
I. A. Samdal, J. A. B. Aasen, L. R. Briggs, E. Dahl and C. O. Miles	7	Comparison of ELISA and LC-MS analyses for yessotoxins in blue mussels (*Mytilus edulis*)
C. Huynh-Delerme, M. Edery, H. Huet, S. Puiseux-Dao, C. Bernard, J.-J. Fontaine, F. Crespeau and A. de Luze	16	Microcystin-LR and embryo–larval development of medaka fish, *Oryzias latipes*. I. Effects on the digestive tract and associated systems
E. V. Kryukova, D. Yu. Mordvintsev, S. Daya, Y. N. Utkin and V. I. Tsetlin	24	Polyclonal antibodies against native weak toxin *Naja kaouthia* discriminate native weak toxins and some other three-fingered toxins against their denaturated forms
M. R. Soares, A. L. Oliveira-Carvalho, L. S. Wermelinger, R. B. Zingali, P. L. Ho, I. de L. M Junqueira-de-Azevedo and M. R. V. Diniz	31	Identification of novel bradykinin-potentiating peptides and C-type natriuretic peptide from *Lachesis muta* venom
S.-J. Hong, G. S. Rim, H. I. Yang, C. S. Yin, H. G. Koh, M.-H. Jang, C.-J. Kim, B.-K. Choe and J.-H. Chung	39	Bee venom induces apoptosis through caspase-3 activation in synovial fibroblasts of patients with rheumatoid arthritis
K. Trummal, K. Tõnismägi, E. Siigur, A. Aaspõllu, A. Lopp, T. Sillat, R. Saat, L. Kasak, I. Tammiste, P. Kogerman, N. Kalkkinen and J. Siigur	46	A novel metalloprotease from *Vipera lebetina* venom induces human endothelial cell apoptosis
P. Hess, L. Nguyen, J. Aasen, M. Keogh, J. Kilcoyne, P. McCarron and T. Aune	62	Tissue distribution, effects of cooking and parameters affecting the extraction of azaspiracids from mussels, *Mytilus edulis*, prior to analysis by liquid chromatography coupled to mass spectrometry
K.-i. Saguchi, Y. Hagiwara-Saguchi, N. Murayama, H. Ohi, Y. Fujita, A. C. M. Camargo, S. M. T. Serrano and S. Higuchi	72	Molecular cloning of serine proteinases from *Bothrops jararaca* venom gland
R. Rajesh, C. D. R. Gowda, A. Nataraju, B. L. Dhananjaya, K. Kemparaju and B. S. Vishwanath	84	Procoagulant activity of *Calotropis gigantea* latex associated with fibrin(ogen)olytic activity
M. Okumura, H. Tsuzuki and B.-I. Tomita	93	A rapid detection method for paralytic shellfish poisoning toxins by cell bioassay
F. Jaramillo-Juárez, M. L. Rodríguez-Vázquez, J. Muñoz-Martínez, T. Quezada-Tristán, F. A. Posadas. del Río, J. Llamas-Viramontes, G. G. Ortíz, A. Feria-Velasco and J. L. Reyes	99	The ATP levels in kidneys and blood are mainly decreased by acute ingestion of tullidora (*Karwinskia humboldtiana*)
T. Kubo, T. Sano, K. Hosoya, N. Tanaka and K. Kaya	104	A new simply and effective fractionation method for cylindrospermopsin analyses
Short communications		
V. Haddad Jr. and O. B. F. Gadig	108	The spiny dogfish ('cação-bagre'): description of an envenoming in a fisherman, with taxonomic and toxinologic comments on the *Squalus* gender
J. Meriluoto, M. Gueimonde, C. A. Haskard, L. Spoof, O. Sjövall and S. Salminen	111	Removal of the cyanobacterial toxin microcystin-LR by human probiotics
Conference report		
J.-P. Chippaux, R. P. Stock and A. Alagón	115	Report of the 2nd International Conference on Envenomations in Africa (Deuxième Colloque International sur les Envenimations en Afrique)

Vol. 46, No. 2

Mini-review

S. Al-Qura'n — 119 — Ethnobotanical survey of folk toxic plants in southern part of Jordan

Articles

L. de Paula Le Sueur, C. B. Collares-Buzato, E. Kalapothakis and M. A. da Cruz-Höfling — 130 — In vitro effect of the *Phoneutria nigriventer* spider venom on cell viability, paracellular barrier function and transcellular transport in cultured cell lines

A. Padilla, T. Govezensky, L. D. Possani and C. Larralde — 142 — Mortality and antibody responses of mice to three successive episodes of experimental scorpion (*Centruroides limpidus limpidus*) envenomation and immunological rescue

S. Uhlig, A. C. Gutleb, U. Thrane and A. Flåøyen — 150 — Identification of cytotoxic principles from *Fusarium avenaceum* using bioassay-guided fractionation

S. C. Finch, A. L. Wilkins, A. D. Hawkes, D. J. Jensen, A. L. MacKenzie, V. Beuzenberg, M. A. Quilliam, C. D. Olseng, I. A. Samdal, J. Aasen, A. I. Selwood, J. M. Cooney, M. Sandvik and C. O. Miles — 160 — Isolation and identification of (44-*R,S*)-44,55-dihydroxyyessotoxin from *Protoceratium reticulatum*, and its occurrence in extracts of shellfish from New Zealand, Norway and Canada

W.-y. Fu, J.-p. Chen, X.-m. Wang and L.-h. Xu — 171 — Altered expression of p53, Bcl-2 and Bax induced by microcystin-LR in vivo and in vitro

D. Butera, R. M. F. Piazza, M. A. McLane, R. Chammas and A. M. M. da Silva — 178 — Molecular engineering of an EGFP/disintegrin-based integrin marker

T. Chijiwa, K. Abe, T. Ogawa, N. N. Nikandrov, S. Hattori, N. Oda-Ueda and M. Ohno — 185 — Amino acid sequence of a basic aspartate-49-phospholipase A_2 from *Trimeresurus flavoviridis* venom and phylogenetic analysis of Crotalinae venom phospholipases A_2

S. L. Dodd, J. Selsby, A. Payne, A. Judge and C. Dott — 196 — Botulinum neurotoxin type A causes shifts in myosin heavy chain composition in muscle

P. Tulayakul, S. Sakuda, K. S. Dong and S. Kumagai — 204 — Comparative activities of glutathione-*S*-transferase and dialdehyde reductase toward aflatoxin B1 in livers of experimental and farm animals

W. S. Maria, D. T. Velarde, L. M. Alvarenga, C. Nguyen, S. Villard, C. Granier and C. Chávez-Olórtegui — 210 — Localization of epitopes in the toxins of *Tityus serrulatus* scorpions and neutralizing potential of therapeutic antivenoms

E. D. Hilborn, W. W. Carmichael, M. Yuan and S. M. F. O. Azevedo — 218 — A simple colorimetric method to detect biological evidence of human exposure to microcystins

D. C. S. Damico, L. G. F. Bueno, L. Rodrigues-Simioni, S. Marangoni, M. A. da Cruz-Höfling and J. C. Novello — 222 — Neurotoxic and myotoxic actions from *Lachesis muta muta* (surucucu) whole venom on the mouse and chick nerve–muscle preparations

Y.-M. Song, X.-X. Tang, X.-G. Chen, B.-B. Gao, E. Gao, L. Bai and X.-R. Lv — 230 — Effects of scorpion venom bioactive polypolypeptides on platelet aggregation and thrombosis and plasma 6-keto-PG $F_{1\alpha}$ and TXB_2 in rabbits and rats

D. Dagnino and J. Schripsema — 236 — ^{1}H NMR quantification in very dilute toxin solutions: application to anatoxin-a analysis

Erratum

B. Ramos-Cerrillo, A. Olvera, G. V. Odell, F. Zamudio, J. Paniagua-Solis, A. Alagon and R. P. Stock — 241 — Erratum to "Genetic and enzymatic characterization of sphingomyelinase D isoforms from the North American fiddleback spiders *Loxosceles boneti* and *Loxosceles reclusa*" [Toxicon 44 (2004) 507–514]

Vol. 46, No. 3

Articles

M.-Y. Bottein Dechraoui, Z. Wang, J. Turquet, M. Chinain, T. Darius, P. Cruchet, F. F. Y. Radwan, R. W. Dickey and J. S. Ramsdell — 243 — Biomonitoring of ciguatoxin exposure in mice using blood collection cards

L. Herfindal, L. Oftedal, F. Selheim, M. Wahlsten, K. Sivonen and S. O. Døskeland — 252 — A high proportion of Baltic Sea benthic cyanobacterial isolates contain apoptogens able to induce rapid death of isolated rat hepatocytes

M.-Y. B. Dechraoui, J. A. Tiedeken, R. Persad, Z. Wang, H. R. Granade, R. W. Dickey and J. S. Ramsdell — 261 — Use of two detection methods to discriminate ciguatoxins from brevetoxins: Application to great barracuda from Florida Keys

R. de Sousa Alves, N. R. F. do Nascimento, P. S. F. Barbosa, M. R. Kerntopf, L. M. A. Lessa, C. M. de Sousa, R. D. Martins, D. F. Sousa, M. G. R. de Queiroz, M. H. Toyama, M. C. Fonteles, A. M. C. Martins and H. S. A. Monteiro — 271 — Renal effects and vascular reactivity induced by *Tityus serrulatus* venom

Y. Zhao, Y. Jin, W.-H. Lee and Y. Zhang — 277 — Isolation and preliminary characterization of a 22-kDa protein with trypsin inhibitory activity from toad *Bufo andrewsi* skin

S. Zalat, S. Elbana, S. Rizzoli, J. C. Schmidt and I. R. Mellor — 282 — Modulation of nicotinic acetylcholine and *N*-methyl-D-aspartate receptors by some Hymenopteran venoms

Y. Angulo, J. M. Gutiérrez, A. M. Soares, W. Cho and B. Lomonte — 291 — Myotoxic and cytolytic activities of dimeric Lys49 phospholipase A_2 homologues are reduced, but not abolished, by a pH-induced dissociation

G. Celedon, F. Venegas, A. M. Campos, M. E. Lanio, D. Martinez, C. Soto, C. Alvarez and E. Lissi — 297 — Role of endogenous channels in red blood cells response to their exposure to the pore forming toxin Sticholysin II

R. G. Stábeli, L. M. P. Magalhães, H. S. Selistre-de-Araujo and E. B. Oliveira — 308 — Antibodies to a fragment of the *Bothrops moojeni* L-amino acid oxidase cross-react with snake venom components unrelated to the parent protein

F. K. Ticli, L. I. S. Hage, R. S. Cambraia, P. S. Pereira, Â. J. Magro, M. R. M. Fontes, R. G. Stábeli, J. R. Giglio, S. C. França, A. M. Soares and S. V. Sampaio — 318 — Rosmarinic acid, a new snake venom phospholipase A_2 inhibitor from *Cordia verbenacea* (Boraginaceae): antiserum action potentiation and molecular interaction

R. E. Welton and J. N. Burnell — 328 — Full length nucleotide sequence of a Factor V-like subunit of oscutarin from *Oxyuranus scutellatus scutellatus* (coastal Taipan)

Z. Zhang, G.-y. Ye, J. Cai and C. Hu — 337 — Comparative venom toxicity between *Pteromalus puparum* and *Nasonia vitripennis* (Hymenoptera: Pteromalidae) toward the hemocytes of their natural hosts, non-target insects and cultured insect cells

Short communications

M. Tzouros, S. Chesnov, S. Bienz, M. Hesse and L. Bigler — 350 — New linear polyamine derivatives in spider venoms

D. Mebs and S. Kauferstein — 355 — Ichthyotoxicity caused by marine cone snail venoms?

Letter to the Editor

J. Huff and P. Chan — 357 — Is marihuana [THC] anti-carcinogenic?

Erratum

S. M. Nascimento, D. A. Purdie and S. Morris — 360 — Erratum to "Morphology, toxin composition and pigment content of *Prorocentrum lima* strains isolated from a coastal lagoon in Southern UK" [Toxicon 45 (2005) 633–649]

Vol. 46, No. 4

Mini-review

N. Oguiura, M. Boni-Mitake and G. Rádis-Baptista — 363 — New view on crotamine, a small basic polypeptide myotoxin from South American rattlesnake venom

Articles

T.O. G. Costa, R. A. V. Morales, J. P. Brito, M. Gordo, A. C. Pinto and C. Bloch Jr. — 371 — Occurrence of bufotenin in the *Osteocephalus* genus (Anura: Hylidae)

P. S. F. Barbosa, A. M. C. Martins, A. Havt, D. O. Toyama, J. S. A. M. Evangelista, D. P. P. Ferreira, P. P. Joazeiro, L. O. S. Beriam, M. H. Toyama, M. C. Fonteles and H. S. A. Monteiro — 376 — Renal and antibacterial effects induced by myotoxin I and II isolated from *Bothrops jararacussu* venom

R.-S. Yang, H.-S. Chiang, C.-H. Tang, C.-S. Yeh and T.-F. Huang — 387 — Rhodostomin inhibits thrombin-enhanced adhesion of ROS 17/2.8 cells through the blockade of αvβ3 integrin

A. V. Osipov, D. Yu. Mordvintsev, V. G. Starkov, L. V. Galebskaya, E. V. Ryumina, P. P. Bel'tyukov, L. V. Kozlov, S. V. Romanov, Y. Doljansky, V. I. Tsetlin and Y. N. Utkin — 394 — *Naja melanoleuca* cobra venom contains two forms of complement-depleting factor (CVF)

Q. He and R. P. Sharma — 404 — Inhibition of tumor necrosis factor α signaling by anti-tumor necrosis factor α antibodies and pentoxifylline is unable to prevent fumonisin hepatotoxicity in mice

R. L. Norris — 414 — First report of a bite by the mottled rock rattlesnake (*Crotalus lepidus lepidus*)

T. Olamendi-Portugal, S. Somodi, J. A. Fernández, F. Z. Zamudio, B. Becerril, Z. Varga, G. Panyi, R. Gáspár and L. D. Possani — 418 — Novel α-KTx peptides from the venom of the scorpion *Centruroides elegans* selectively blockade Kv1.3 over IKCa1 K^+ channels of T cells

C.-H. Wang, R. Monette, S.-C. Lee, P. Morley and W.-g. Wu — 430 — Cobra cardiotoxin-induced cell death in fetal rat cardiomyocytes and cortical neurons: different pathway but similar cell surface target

P. Truman, R. A. Keyzers, P. T. Northcote, V. Ambrose, N. A. Redshaw and F. H. Chang — 441 — Lipophilic toxicity from the marine dinoflagellate *Karenia brevisulcata*: use of the brevetoxin neuroblastoma assay to assess toxin presence and concentration

E. R. Evans, J. M. Sutton, A. Gravett and C. C. Shone — 446 — Analysis of the substrate recognition domain determinants of Botulinum Type B toxin using Phage Display

R. Martins, P. Pereira, M. Welker, J. Fastner and V. M. Vasconcelos — 454 — Toxicity of culturable cyanobacteria strains isolated from the Portuguese coast

J. F. Blom and F. Jüttner — 465 — High crustacean toxicity of microcystin congeners does not correlate with high protein phosphatase inhibitory activity

Short communication

Z. Wu, Y. Yang, L. Xie, G. Xia, J. Hu, S. Wang and R. Zhang — 471 — Toxicity and distribution of tetrodotoxin-producing bacteria in puffer fish *Fugu rubripes* collected from the Bohai Sea of China

Corrigendum

R. E. Gawley, M. Shanmugasundaram, J. B. Thorne and R. M. Tarkka — 477 — Corrigendum to "Selective detection of saxitoxin over tetrodotoxin using acridinylmethyl crown ether chemosensor" [Toxicon 45 (2005) 783-787]

Vol. 46, No. 5

Articles

D. Butzke, R. Hurwitz, B. Thiede, S. Goedert and T. Rudel — 479 — Cloning and biochemical characterization of APIT, a new L-amino acid oxidase from *Aplysia punctata*

G. D. Laing, S. J. Compton, R. Ramachandran, G. L. J. Fuller, M. C. Wilkinson, S. C. Wagstaff, S. P. Watson, A. S. Kamiguti, R. D. G. Theakston and Y. A. Senis — 490 — Characterization of a novel protein from *Proatheris superciliaris* venom: Proatherocytin, a 34-kDa platelet receptor PAR1 agonist

H.-G. Zhang, Y. Sun, M.-Y. Duan, Y.-J. Chen, D.-F. Zhong and H.-Q. Zhang — 500 — Separation and identification of *Aconitum* alkaloids and their metabolites in human urine

L. Yin, J. Huang, W. Huang, D. Li, G. Wang and Y. Liu — 507 — Microcystin-RR-induced accumulation of reactive oxygen species and alteration of antioxidant systems in tobacco BY-2 cells

S. Uhlig, D. Petersen, A. Flåøyen and A. Wilkins — 513 — 2-Amino-14,16-dimethyloctadecan-3-ol, a new sphingosine analogue toxin in the fungal genus *Fusarium*

J. P. Zuliani, J. M. Gutiérrez, L. L. C. e Silva, S. C. Sampaio, B. Lomonte and C. de Fátima Pereira Teixeira — 523 — Activation of cellular functions in macrophages by venom secretory Asp-49 and Lys-49 phospholipases A_2

L. Li, P. Xie and J. Chen — 533 — In vivo studies on toxin accumulation in liver and ultrastructural changes of hepatocytes of the phytoplanktivorous bighead carp i.p.-injected with extracted microcystins

C. C. Gay, L. C. Leiva, S. Maruñak, P. Teibler and O. Acosta de Pérez — 546 — Proteolytic, edematogenic and myotoxic activities of a hemorrhagic metalloproteinase isolated from *Bothrops alternatus* venom

M. L. Saker, A.-D. Jungblut, B. A. Neilan, D. F. K. Rawn and V. M. Vasconcelos — 555 — Detection of microcystin synthetase genes in health food supplements containing the freshwater cyanobacterium *Aphanizomenon flos-aquae*

C.-K. Wong, P. Hung, K. L. H. Lee and K.-M. Kam — 563 — Study of an outbreak of ciguatera fish poisoning in Hong Kong

T. Torgersen, J. Aasen and T. Aune — 572 — Diarrhetic shellfish poisoning by okadaic acid esters from Brown crabs (*Cancer pagurus*) in Norway

J. Lago, F. Santaclara, J. M. Vieites and A. G. Cabado — 579 — Collapse of mitochondrial membrane potential and caspases activation are early events in okadaic acid-treated Caco-2 cells

H. N. Chou, C. P. Huang and C. Y. Chen — 587 — Accumulation and depuration of paralytic shellfish poisoning toxins by laboratory cultured purple clam *Hiatula* diphos Linnaeus

Short communication

A. Aaspõllu, J. Siigur and E. Siigur — 591 — cDNA cloning of a novel P–I lebetase isoform Le-4

Vol. 46, No. 6

Articles

A. M. C. Martins, F. C. M. Sousa, P. S. F. Barbosa, M. H. Toyama, D. O. Toyama, C. C. Aprígio, M. G. R. Queiroz, M. C. Guarnieri, A. Havt, D. B. de Menezes, M. C. Fonteles and H. S. A. Monteiro — 595 — Action of anti-bothropic factor isolated from *Didelphis marsupialis* on renal effects of *Bothrops erythromelas* venom

L. de Haro, P. Pommier, L. Tichadou, M. Hayek-Lanthois and J. Arditti — 600 — Poisoning by *Coriaria myrtifolia* Linnaeus: a new case report and review of the literature

D. G. Beghini, M. A. da Cruz-Höfling, P. Randazzo-Moura, L. Rodrigues-Simioni, J. C. Novello, S. Hyslop and S. Marangoni — 604 — Cross-neutralization of the neurotoxicity of *Crotalus durissus terrificus* and *Bothrops jararacussu* venoms by antisera against crotoxin and phospholipase A_2 from *Crotalus durissus cascavella* venom

R. Sagou, R. Amanhir, H. Taleb, P. Vale, M. Blaghen and M. Loutfi — 612 — Comparative study on differential accumulation of PSP toxins between cockle (*Acanthocardia tuberculatum*) and sweet clam (*Callista chione*)

Y. Zhao, Y. Jin, J.-H. Wang, R.-R. Wang, L.-M. Yang, W.-H. Lee, Y.-T. Zheng and Y. Zhang — 619 — A novel heme-containing protein with anti-HIV-1 activity from skin secretions of *Bufo andrewsi*

R. B.-L. Garrec, E. Benoit, M.-P. Sauviat, R. J. Lewis, J. Molgó and D. Laurent — 625 — Ability of some plant extracts, traditionally used to treat ciguatera fish poisoning, to prevent the in vitro neurotoxicity produced by sodium channel activators

Y. Zhao, Y. Jin, S.-S. Wei, W.-H. Lee and Y. Zhang — 635 — Purification and characterization of an irreversible serine protease inhibitor from skin secretions of *Bufo andrewsi*

D. Mebs, W. Pogoda, R. Maneyro and A. Kwet — 641 — Studies on the poisonous skin secretion of individual red bellied toads, *Melanophryniscus montevidensis* (Anura, Bufonidae), from Uruguay

S. Moret, T. Populin, L. S. Conte and G. Cosens — 651 — HPLC determination of free nitrogenous compounds of *Centaurea solstitialis* (Asteraceae), the cause of equine nigropallidal encephalomalacia

E. Pelosi, C. Lubelli, L. Polito, L. Barbieri, A. Bolognesi and F. Stirpe — 658 — Ribosome-inactivating proteins and other lectins from Adenia (Passifloraceae)

L. M. Alvarenga, R. A. Machado de Avila, P. R. Amim, M. S. Martins, E. Kalapothakis, M. E. de Lima, R. G. Santos, C. Granier and C. Chávez-Olórtegui — 664 — Molecular characterization of a neutralizing murine monoclonal antibody against *Tityus serrulatus* scorpion venom

S. Kozlov and E. Grishin — 672 — Classification of spider neurotoxins using structural motifs by primary structure features. Single residue distribution analysis and pattern analysis techniques

B. Jennings, W. Spearman and E. Shephard — 687 — A novel 25kDa protein from the venom of *Bitis arietans* with similarity to C-type lectins causes fibrinogen-dependent platelet agglutination

A. H. Kintner, J. E. Seymour and S. L. Edwards — 699 — Variation in lethality and effects of two Australian chirodropid jellyfish venoms in fish

Letter to the Editor
S. Creer — 709 — On the application of molecular barcodes in toxinological research

Vol. 46, No. 7

Articles
C. E. Pook and R. McEwing — 711 — Mitochondrial DNA sequences from dried snake venom: a DNA barcoding approach to the identification of venom samples

S. Hu, W. Li, L. Chen and J. Liu — 716 — Expression of a recombinant anticoagulant C-type lectin-like protein ACFI in *Pichia pastoris*: Heterodimerization of two subunits is required for its function

R. Molina, I. Moreno, S. Pichardo, A. Jos, R. Moyano, J. G. Monterde and A. Cameán — 725 — Acid and alkaline phosphatase activities and pathological changes induced in Tilapia fish (*Oreochromis* sp.) exposed subchronically to microcystins from toxic cyanobacterial blooms under laboratory conditions

C. A. Dal Belo, G. B. Leite, M. H. Toyama, S. Marangoni, A. P. Corrado, M. D. Fontana, A. Southan, E. G. Rowan, S. Hyslop and L. Rodrigues-Simioni — 736 — Pharmacological and structural characterization of a novel phospholipase A_2 from *Micrurus dumerilii carinicauda* venom

C. V. Iglesias, R. Aparicio, L. Rodrigues-Simioni, E. A. Camargo, E. Antunes, S. Marangoni, D. de Oliveira Toyama L. O. S. Beriam, H. S. A. Monteiro and M. H. Toyama — 751 — Effects of morin on snake venom phospholipase A_2 (PLA_2)

V. Fadel, P. Bettendorff, T. Herrmann, W. F. de Azevedo Jr, E. B. Oliveira, T. Yamane and K. Wüthrich — 759 — Automated NMR structure determination and disulfide bond identification of the myotoxin crotamine from *Crotalus durissus terrificus*

T. Honma, S. Minagawa, H. Nagai, M. Ishida, Y. Nagashima and K. Shiomi — 768 — Novel peptide toxins from acrorhagi, aggressive organs of the sea anemone *Actinia equina*

M. Herrera, G. León, A. Segura, F. Meneses, B. Lomonte, J. P. Chippaux and J. M. Gutiérrez — 775 — Factors associated with adverse reactions induced by caprylic acid-fractionated whole IgG preparations: comparison between horse, sheep and camel IgGs

G. K. Isbister and J. N. A. Hooper — 782 — Clinical effects of stings by sponges of the genus Tedania and a review of sponge stings worldwide

L. M. M. Cesar, M. A. Mendes, C. F. Tormena, M. R. Marques, B. M. de Souza, D. M. Saidemberg, J. C. Bittencourt and M. S. Palma — 786 — Isolation and chemical characterization of PwTx-II: A novel alkaloid toxin from the venom of the spider Parawixia bistriata (Araneidae, Araneae)

H. Vázquez, A. Chávez-Haro, W. García-Ubbelohde, R. Mancilla-Nava, J. Paniagua-Solís, A. Alagón and C. Sevcik — 797 — Pharmacokinetics of a $F(ab')_2$ scorpion antivenom in healthy human volunteers

S. R. Zamuner, J. P. Zuliani, C. M. Fernandes, J. M. Gutiérrez and C. de F. Pereira Teixeira — 806 — Inflammation induced by *Bothrops asper* venom: release of proinflammatory cytokines and eicosanoids, and role of adhesion molecules in leukocyte infiltration

H. S. Neto and M. J. Marques — 814 — Microvessel damage by *B. jararacussu* snake venom: pathogenesis and influence on muscle regeneration

S. K. Singh and S. B. Deshpande — 820 — Intra-arterial injection of *Mesobuthus tamulus* venom elicits cardiorespiratory reflexes involving perivascular afferents

Erratum
Publisher's note — 827 — The spiny dogfish ('cação-bagre'): description of an envenoming in a fisherman, with taxonomic and toxinological comments on the *Squalus* genus [Toxicon 46 (2005) 108–110]

V. Haddad Jr and O. B. F. Gadig — 828 — The spiny dogfish (*Squalus cubensis/megalops* group): The envenoming of a fisherman, with taxonomic and toxinological comments on the *Squalus* genus

Vol. 46, No. 8

Review

R. C. Rodríguez de la Vega and L. D. Possani — 831 — Overview of scorpion toxins specific for Na^+ channels and related peptides: biodiversity, structure–function relationships and evolution

Articles

D.-Q. Li, Y. Li, Y. Liu, Y.-M. Bao, B. Hu and L.-J. An — 845 — Catalpol prevents the loss of CA1 hippocampal neurons and reduces working errors in gerbils after ischemia-reperfusion injury

K. J. James, M. Gillman, M. F. Amandi, A. López-Rivera, P. F. Puente, M. Lehane, S. Mitrovic and A. Furey — 852 — Amnesic shellfish poisoning toxins in bivalve molluscs in Ireland

L. Yin, J. Huang, W. Huang, D. Li and Y. Liu — 859 — Responses of antioxidant system in *Arabidopsis thaliana* suspension cells to the toxicity of microcystin-RR

T. Jabeen, N. Singh, R. K. Singh, A. S. Ethayathulla, S. Sharma, A. Srinivasan and T. P. Singh — 865 — Crystal structure of a novel phospholipase A_2 from *Naja naja sagittifera* with a strong anticoagulant activity

V. Morais and H. Massaldi — 876 — Effect of pepsin digestion on the antivenom activity of equine immunoglobulins

A. Pachiappan, M. M. Thwin, J. Manikandan and P. Gopalakrishnakone — 883 — Glial inflammation and neurodegeneration induced by candoxin, a novel neurotoxin from *Bungarus candidus* venom: global gene expression analysis using microarray

B. Spilsberg, K. Sandvig and S. Wälchli — 900 — Reconstitution of active diphtheria toxin based on a hexahistidine tagged version of the B-fragment produced to high yields in bacteria

N. N. Nikandrov, M. Deshimaru, A. Tani, T. Chijiwa, H. Shibata, C.-C. Chang, Y. Fukumaki, T. Ito and M. Ohno — 907 — Purification, primary structures and evolution of coagulant proteases from *Deinagkistrodon actus* venom

V. den E. Erwin and B. Emmanuel — 918 — Envenoming by the viperid snake *Eristicophis macmahonii*

E. A. Camargo, L. C. M. Esquisatto, M. A. Esquisatto, M. T. C. P. Ribela, A. C. Cintra, J. R. Giglio. E. Antunes and E. C. T. Landucci — 921 — Characterization of the acute pancreatitis induced by secretory phospholipases A_2 in rats

F. G. Silvestre, C. S. de Castro, J. F. de Moura, M. S. Giusta, M. D. Maria, É. S. S. Álvares, F. C. F. Lobato, R. A. Assis, L. A. Gonçalves, I. C. Gubert, C. Chávez-Olórtegui and E. Kalapothakis — 927 — Characterization of the venom from the Brazilian Brown Spider *Loxosceles similis* Moenkhaus, 1898 (Araneae, Sicariidae)

M. Deshimaru, C. Tanaka, K. Fujino, N. Aoki, S. Terada, S. Hattori and M. Ohno — 937 — Properties and cDNA cloning of an antihemorrhagic factor (HSF) purified from the serum of *Trimeresurus flavoviridis*

Y. Kotaki, E. F. Furio, M. Satake, N. Lundholm, T. Katayama, K. Koike, V. P. Fulgueras, F. A. Bajarias, Y. Takata, K. Kobayashi, S. Sato, Y. Fukuyo and M. Kodama — 946 — Production of isodomoic acids A and B as major toxin components of a pennate diatom *Nitzschia navis-varingica*

Short communications

W. Banlunara, A. Bintvihok and S. Kumagai — 954 — Immunohistochemical study of proliferating cell nuclear antigen (PCNA) in duckling liver fed with aflatoxin B_1 and esterified glucomannan

M. C. Dos-Santos, E. B. Assis, T. D. Moreira, J. Pinheiro and C. L. Fortes-Dias — 958 — Individual venom variability in *Crotalus durissus ruruima* snakes, a subspecies of *Crotalus durissus* from the Amazonian region